

REMARKS

Claims 1-84 are now pending in the application. Claims 5-8, 17, 28-30, 40, 51-53, 63, 70-72 and 82 are amended herein for minor reasons. Therefore, no new matter has been added. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendment and remarks contained herein.

CLAIM OBJECTIONS

Claims 1-84 stand objected to by the Examiner. The Examiner alleges that following terms used throughout the claims - "whether", "when", "unapproved" and "approved" - creates confusion. The Examiner specifically refers to Claim 6 as an example. The Examiner is not specific as to what is confusing about Claim 6 or any other claim.

Claim 6, as amended, recites:

"The apparatus of claim 5, wherein the controller determines whether the association exists between the one of the plurality of network ports and the source MAC address when determining whether the unapproved association exists between the one of the plurality of network ports and the source MAC address, and

wherein the controller determines whether the association between the one of the plurality of network ports and the source MAC address is approved when the association exists between the one of the plurality of network ports and the source MAC address."

With respect to the first limitation of Claim 6, the controller performs two tasks to determine if a first condition A and/or a second condition B exist. The controller determines: A) whether the association exists between the one of the plurality of network ports and the source MAC address; and B) whether the unapproved association exists between the one of the plurality of network ports and the source MAC address.

The term "whether" means "if". Thus, the controller determines if A exists and if B exists. The term "when" may be defined as "in the event that". See, for example, www.dictionary.com. Thus, in the context of Claim 6, the term "when" refers to the performance of a first task in the event that a second task is performed. The controller determines if A exists when the controller determines if B exists. In other words, if B is determined, A is determined.

With respect to the second limitation, the controller performs a third determination task when the second condition B exists. Thus, when condition B exists, the controller performs the third determining task. The controller determines whether (if) the association between the one of the plurality of network ports and the source MAC address is approved when condition B exists.

Therefore, there does not appear to be any confusion in the use of the terms "whether" and "when" in the limitations of

Claim 6. Applicants have reviewed the Claims and are unsure what specifically is confusing and/or ambiguous with the language of Claims 1-84. The definition of the terms "whether" and "when" would be clear to one skilled in the art and it does not appear that these terms have been used in such an abundant manner as to render any of Claims 1-84 confusing or ambiguous.

Note the terms "unapproved" and "approved" are not recited in Claim 6. The term "approved" refers to a device that checks and provides a confirmation that an item of concern (such as an association) is accepted or permitted. Although the terms "unapproved" and "approved" are used in other claims, their use and definition would be clear to one skilled in the art, especially in view of the application.

If after reviewing this Response the Examiner maintains that one or more of Claims 1-84 is confusing and/or ambiguous, Applicants respectfully request further clarification as to why the use of the terms "whether", "when", "unapproved" and/or "approved" is confusing in the specific claim(s) of concern.

The Examiner further alleges that the limitation of Claim 2 is contained in Claim 1. The Examiner alleges that a similar issue exists with respect to Claims 25, 48 and 67. Applicants respectfully disagree.

Claim 2 recites:

"The apparatus of claim 1, wherein the controller further determines whether an association exists between one of the plurality of network ports and the source MAC address."

Applicants are unable to find this limitation in Claim 1. Claim 1 recites that the controller sends a request to approve an association. Claim 1 does not recite that the controller determines whether (if) an association exists. Although Claim 1 recites that the controller sends the request when an approval for an association between a source MAC address and a network port has been received, receiving an approval for an association is different than determining if an association exists. The term "approval", as used in Claim 1, refers to permitted communication between a port and a source with a MAC address. Communication may be permitted when an approval is received. The term "approval" does not refer to determining if an association exists.

Thus, Claim 1 does not appear to include the limitation of Claim 2. For at least similar reasons, Claims 24, 47 and 66 do not appear to include the limitations of Claims 25, 48 and 67.

Therefore, reconsideration and withdrawal of these objections are respectfully requested.

REJECTION UNDER 35 U.S.C. § 112

Claims 4-23, 27-46 and 50-84 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point and distinctly claim the subject matter that Applicants regard as the invention. This rejection is respectfully traversed.

The Examiner alleges that Claims 4-19 do not reflect the steps of FIG. 2, but instead use vague and ambiguous language. The Examiner again refers to Claim 6, but does not specify what in Claim 6 is ambiguous or vague.

Applicants note that the limitations of Claims 4-12, 27-35, 50-58 and 66-77 are directed to the steps of FIG. 2. The limitations of Claims 13-16, 36-39, 59-62 and 78-81 are directed to the steps of FIG. 3. The limitations of Claims 17-19, 40-42, 63-65 and 82-84 are directed to the steps of FIG. 4. The limitations of Claims 43-46 and 66 are directed to FIG. 1.

The limitations of Claim 6 are directed to steps 204, 216 and 218 of FIG. 2. The first limitation of Claim 6 recites "the controller determines whether the association exists between the one of the plurality of network ports and the source MAC address". This first determination task is directed to step 204 of FIG. 2. In step 204, a controller determines whether a source MAC address of a packet is stored in a forwarding database. An association between a port and the source MAC

address is deemed to exist when the source MAC address is stored in the forwarding database.

The first limitation of Claim 6 also recites "determining whether the unapproved association exists between the one of the plurality of network ports and the source MAC address". This second determination task is directed to steps 216 and 218 of FIG. 2. In step 216, the controller determines if an approval flag is set. When the approval flag is set, an association has not been approved. In step 218, if the port ID of the receive port is not the same port that is stored in association with the source MAC address, then a new unapproved association is created and stored in step 210. Thus, the first limitation is directed to steps of FIG. 2 and would be clear to one skilled in the art.

As steps 216 and 218 are performed in certain circumstances when step 204 is performed and vice versa, the first limitation of Claim 6 is supported and is clear in view of steps 204, 216 and 218 of FIG. 2.

The second limitation of Claim 6 recites "the controller determines whether the association between the one of the plurality of network ports and the source MAC address is approved". This third determination task is performed when a condition exists. The condition is "when the association exists between the one of the plurality of network ports and the source

MAC address". The third determination task is directed to steps 216 and 218 of FIG. 2. The condition is directed to step 204.

In step 204, the controller determines if a source MAC address is stored in the forwarding database. If the source MAC address is stored in the forwarding database, then an association exists between a network port and the source MAC address. In step 216, the controller determines whether the approval flag is set. If the approval flag is set, then an unapproved association exists. If the approval flag is not set, then step 218 is performed. In step 218, if the port ID of the port that received the packet is the same port that is stored in association with the source MAC address, then the association exists and is approved. If the port ID of the receive port is not the same, then a new unapproved association is to be created and stored in step 210.

Thus, the second limitation and corresponding condition are directed to steps of FIG. 2 and would be clear to one skilled in the art. Applicants submit that the limitations of Claims 4-5 and 7-12, 27-35, 50-58, and 66-77 are also directed to the steps of FIG. 2.

If the Examiner maintains that any particular limitation of Claims 4-23, 27-46 and 50-84 is vague or ambiguous, Applicants request that the Examiner identify the limitation and claim of

concern and further explain why that limitation is vague and/or ambiguous.

The Examiner also alleges that Claim 8 lacks antecedent basis for "the entry". Claim 8 is amended herein to replace "the entry" with "an entry".

The Examiner further alleges that Claims 20-23 are vague and indefinite because it is not known if Claims 20-23 depend on Claim 1 or are independent Claims.

According to 37 CFR 1.72(c), a dependent claim refers back to and further limits another claim. Claims 20-23 ultimately depend from and further limit Claim 1. Claims 20-23 recite an integrated circuit and a network switch that include the apparatus of Claim 1. The apparatus of Claim 1 may be implemented on various devices. Claims 20-23 narrow the device to specifically one of an integrated circuit and a network switch. As Claims 20 and 21: refer to Claim 1; include the limitations of Claim 1; and further limit Claim 1 to be implemented on an integrated circuit or in a network switch, Claims 20 and 21 depend from and further limit Claim 1. Claims 22 and 23 depend from Claim 21.

Thus, the format of Claims 20-23 is proper. This format prevents all of the elements of a first claim (e.g., the elements of the apparatus of Claim 1) from being repeated in

subsequent dependent claims and thus is efficient. Therefore, the scope of Claims 20-23 is clear and to redraft Claims 20-23 in independent form is unnecessary.

For at least the above reasons, Applicants request reconsideration and withdrawal of the 35 U.S.C. § 112 rejections.

REJECTION UNDER 35 U.S.C. § 102

Claims 1-7, 9-11, 15-19, 24-30, 32-34, 38-53, 55-57, 61-72, 74-76 and 80-84 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Pat. No. 6,115,378 ("Hendel"). This rejection is respectfully traversed.

Claim 1 recites:

"a controller to send, to the CPU interface, a request to approve an association between one of the plurality of network ports and a source media access control (MAC) address of a packet received on the one of the plurality of network ports when no request to approve the association between the one of the plurality of network ports and the source MAC address has been sent to the CPU interface, and

send, to the CPU interface, the request when an approval for an association between the source MAC address and a different one of the plurality of network ports has been received from the CPU interface."

A. Hendel does not show, teach, or suggest a controller that sends to a CPU interface a request to approve an association between a network port and a source MAC address of a packet when: I) no request to approve the association has been sent to a CPU interface; and II) an approval for an association between the source MAC address and a different network port has been received from the CPU interface.

Hendel discloses a subsystem 410 and a central processing system (CPS) 460. According to col. 11, line 46-col. 12, line 29 of Hendel, the subsystem 410: receives a packet from a port; forwards the packet if there is a match between the packets header and destination address in a forwarding memory 413; and floods the packet to all ports of the subsystem 410 if there is not a match. After receiving the packet from the subsystem 410, the CPS 460: checks a central memory for an address match; and copies the address match to the forwarding memory 413 if the CPS 460 finds a match.

The subsystem 410 does not send a request to approve an association between a network port and a source MAC address to the CPS 460. The subsystem 410 merely indicates to the CPS 460 that a match is not stored in the forwarding memory 413.

Also, the subsystem 410 sends the received packet to the CPS 460 when there is not a match in the forwarding memory 413. The subsystem 410 does not send the received packet when: no request to approve an association has been sent to a CPU

interface (condition I); and/or an approval for an association between a source MAC address and a different network port has been received from a CPU interface (condition II). The subsystem 410 does not include logic to send a packet and/or to send a request to approve an association when either condition I or II exists. The subsystem 410 of Hendel simply does not determine whether conditions I and/or II exist.

For at least the above reasons, the subsystem 410 of Hendel operates differently than the controller of Claim 1. Thus, Hendel fails to disclose each and every element of Claim 1.

Therefore, Claim 1 is allowable for at least the above reasons.

B. Other Claims

Independent Claims 24, 47 and 66 are allowable for at least similar reasons as Claim 1. Dependent Claims 2-23, 25-46, 48-65 and 67-84 ultimately depend from Claims 1, 24, 47 and 66 and are therefore allowable for at least similar reasons. Applicants' position with respect to Claims 2-84 should not be understood as implying that no other reasons for the patentability of Claims 2-84 exist. Applicants reserve the right to address these other reasons at a later date if needed.

C. Other Rejections

Claims 8, 12-14, 31, 35-37, 54, 58-60, 73 and 77-79 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over

Hendel in view of U.S. Pat. No. 5,339,449 ("Karger"). This rejection is respectfully traversed.

Karger does not remedy the deficiencies of Hendel with respect to Claims 1, 24, 47 and 66. Claims 8, 12-14, 31, 35-37, 54, 58-60, 73 and 77-79 ultimately depend from Claims 1, 24, 47 and 66 and are therefore in condition for allowance for at least similar reasons. Applicants' position with respect to Claims 8, 12-14, 31, 35-37, 54, 58-60, 73 and 77-79 should not be understood as implying that no other reasons for the patentability of Claims 8, 12-14, 31, 35-37, 54, 58-60, 73 and 77-79 exist. Applicants reserve the right to address these other reasons at a later date if needed.

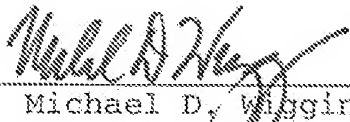
CONCLUSION

It is believed that all of the stated grounds of rejection have been properly addressed. For all of the reasons set forth above, Applicants submit that the application is in condition for allowance. Applicants therefore respectfully request that the Examiner reconsider and withdraw all presently outstanding rejections. By addressing particular positions taken by the Examiner in the above remarks, Applicants do not acquiesce to other positions that have not been explicitly addressed. In addition, Applicants' arguments for the patentability of a claim should not be understood as implying that no other reasons for the patentability of that claim exist.

If the Examiner believes that personal communication will allow any outstanding issues to be resolved, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

Dated: January 11, 2010

By: 
Michael D. Higgins
Reg. No. 54,754

Jeffrey J. Chapp
Reg. No. 50,579

HARNES, DICKEY & PIERCE, P.L.C.
P.O. Box 828
Bloomfield Hills, Michigan 48303
(248) 641-1600

MDW/JJC/ma

15062386.1